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MEMORIAL SKETCH

OF THE

LIFE AND CHARACTER

OF

EZEKIEL WEBSTER DIMOND,

LATE PROFESSOR OF GENERAL AND AGRICULTURAL CHEMISTRY IN THE
NEW HAMPSHIRE COLLEGE OF AGRICULTURE
AND THE MECHANIC ARTS;

PREPARED AT THE REQUEST OF

The Board of Agriculture,

BY

JOSEPH B. WALKER.

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MEMORIAL SKETCH.

PROF. EZEKIEL W. DIMOND.

Some thirty-five years ago, there lived in the town of Warner a family consisting of a father, mother, and five children. They were in moderate circumstances, and supported themselves upon a small farm. The father died in 1842, and two years after the mother was laid beside him in her grave. The children drew closer their little circle, and for a time maintained the family home. Prudential considerations, however, at length urged their separation, and it was discontinued.

The youngest of these children was Ezekiel Dimond, the subject of this memorial sketch. He was born at Warner, on the 7th day of August, 1836, and was, at the dispersion of his family, about eleven years of age—a bright, energetic, noble-hearted boy. But he was an orphan; and orphanage is at best a bitter inheritance. As he stood upon life's threshold, trying to penetrate its future, little save toil and self-dependence was revealed to him. Kind friends, indeed, came forward to advise and cheer him as best they could; but the terrible oppression of loneliness which settles upon the spirits of a boy in his situation is not readily removed.

Following their counsels, he left Warner in 1846 and went

to Concord to live, until twenty-one years of age, with Mr. Daniel Knowlton, a worthy farmer residing in the south-west part of the town, upon the eastern slope of Dimond's hill, an important swell of land named many years before for his great grandfather, Ezekiel Dimond—a man of positive character, and somewhat prominent in his time. Here, for the next ten years, his life was the ordinary life of a boy and youth upon an average New England farm. He plowed, and planted, and sowed. He mowed, and reaped, and harvested. He learned the use of the axe, and became a skilful teamster. Practice and observation revealed to him the more desirable characteristics of cattle, sheep, swine, and domestic fowls, and taught him the best methods of rearing them. A strong mechanical taste, fostered by a frequent use of tools, as the farm necessities demanded, made him by degrees a tolerable carpenter and joiner.

To these practical instructions of the farm were added those of the district school, which he attended in winter. This had, during the period of his attendance, several superior teachers, from whose instructions he derived great and permanent benefits. Mr. and Mrs. Knowlton were members of the First Congregational Church in Concord, then under the care of Dr. Nathaniel Bouton. With them he attended upon the religious services of this body, and was, for a time, a member of its Sunday-school.

In such employments, and under such influences, was passed the critical period of his youth. The regular duties of the farm, plain, nutritious living, and a life in the open air compacted his muscles, and gave to him a vigor of constitution without which he could not have borne the burdens and responsibilities which the future was holding in store for him.

But during this ten years there had gradually awakened within him an ardent desire for a liberal education and a wider

sphere of action. This continued and strengthened. To gratify it, however, seemed beyond all possibilities attaching to him, and he mentioned it to but few persons, if to any. He had received, fortunately, while with Mr. Knowlton, a little patrimony of some three hundred dollars from his father's estate, which his modest earnings had increased to five hundred. With this he determined to enlarge somewhat the acquirements he had made in the district school, and entered New London academy for the fall term of 1855. At its close he returned to Concord and resumed his duties upon the farm. The next autumn he went again to New London, and passed there a second term. A classmate speaks of him as showing at that time a very extensive memory, and a decided taste for mathematics, in which he excelled. The spring following we find him, indeed, upon the farm, but, unsatisfied with all the prospects of an agricultural life, more eager than ever before for an education. Yet no way for its attainment seemed possible, and between intense desire and dark despair he plodded on for a year or two, uncertain what to do. "Why did you not inform me of your wish?" said to him, on a certain occasion, years after, his old pastor Dr. Bouton. "Because you were a minister, and I was afraid of you. Furthermore, I saw no way whatever in which my desires might be realized," said he in reply.

About this time, however, a casual remark by a cherished female friend,* to whom he was afterwards betrothed, dispelled at once and forever his indecision, and determined him to enter immediately upon a course of continuous study, and pursue it, he knew not how, to its end. There are critical points in a human life when slightest influences may settle its whole future. There are resolute natures which, after calmly surveying difficulties that to the general mind appear impossibilities, determine to grapple and conquer them, come what will.

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*Miss Almira F. Abbot, who died Dec. 1, 1862.

Thus early appeared in Mr. Dimond that firmness of purpose which never faltered, bearing its possessor over obstacles sometimes of appalling magnitude, and leading ever to ultimate success.

Resolve and action were never far apart with him. He entered the Kimball Union academy, at Meriden, in the autumn of 1858, and commenced at once the course of study preparatory to entering college. The double task of performing his academical duties and providing at the same time for his personal support, here awaited him. But he was young, vigorous, courageous. Care sat lightly upon him, and hope over beckoned him onward. His mechanical skill and agricultural experience here became available, and he found remunerative employment for his leisure hours in joiner-work and gardening. In winter he replenished his slender purse by the teaching of district schools. Evincing a willingness to help himself, he thereby commended himself to the kind offices of others. Aid from the elemosynary funds of the institution was from time to time afforded him, supplemented occasionally by that of friends who knew of his struggles and applauded his efforts.

While at Meriden he became deeply interested in the subject of personal religion, and joined the Congregational church. His membership continued until 1869, when, upon going to Hanover, it was removed to the church of the same denomination in that town. For a time he thought of adopting that of the ministry as his future profession, but his decided predilection for mathematics and the natural sciences led, ere long, to the relinquishment of this anticipation. Having successfully completed the course prescribed for entering college, he graduated on the 18th day of July, 1861, delivering at the closing exercises of the school an original oration on "Present Conflicts—their Design."

In the fall following, Mr. Dimond entered Middlebury college. Pecuniary considerations settled his preference for this institution over the older and more widely known one of his own state. Here, as at Meriden, he was largely dependent for support upon his own efforts. During three successive winters he taught the village school at Springfield, Vermont, and in the autumn of one year was a teacher of the Methodist academy in that town.

While at Middlebury, he was for a time an assistant,—in his laboratory,—of Prof. Henry M. Seely, and enjoyed unusual facilities for acquiring a thorough knowledge of chemistry, which became ever after his favorite science. Here it was that he laid broad and deep the foundations of those extensive acquirements of chemical knowledge, which he subsequently used to so great advantage. He has often alluded with satisfaction to his hours in this laboratory.

A little circumstance connected with his adoption of a middle name, which occurred while he was at Middlebury, may here claim a moment's notice. Up to this period, his personal appellation had always been Ezekiel Dimond, and nothing more. The potency of fashion is more sensibly felt than it is easily accounted for. That of assuming middle names, by those previously without them, was then in vogue at Middlebury, and to its claims he, like others in his college, yielded, inserting between his Christian and surname the honored addition of "Webster." This fact will account for the difference of names he bore at the beginning and close of his college life.

He graduated with honor in 1865, and went, soon after, to Cambridge, to pursue still further his scientific studies under the late Prof. Agassiz. He was there for about a year, making such further acquisitions in his chosen studies as to his judgment seemed necessary. At the close of this period some eight years had elapsed since, with strong misgivings, he had

resolved upon the attainment of a liberal education. One after another he had surmounted the difficulties attending the undertaking. His effort had been a success, and the joy resulting from a triumph over serious obstacles was his.

He now felt that the time had arrived when he should enter upon the duties of his profession. His efforts for self-support, during this long preparatory course, great as they had been, had not entirely sufficed for its accomplishment. Friends had, from time to time, extended to him such pecuniary assistance as he needed, and his sensitive spirit was restless to discharge, as soon as practicable, the obligations resting upon him.

In the summer or fall of 1866, an opening occurring, he went to Worcester, Mass., and became connected with the Oread Institute as its lecturer on elementary chemistry. He also gave lectures about this time, upon the same subject, in the Abbot Female Seminary at Andover, and also at Sterling, in Massachusetts.

While at Worcester he became acquainted with Mr. Sidney Smith, who had devised a stove and steam boiler fire-box, of peculiar construction, and was seeking some competent person to investigate his invention and prepare a popular exposition of the scientific principles embodied therein. Satisfactory compensation for the service required was offered by him to Mr. Dimond, and he began at once the work assigned him. This engagement involved careful chemical investigations, and resulted in the production of a clearly written octavo volume of 162 pages, on the chemistry of combustion, profusely illustrated by colored diagrams and wood-cuts.*

The writing of this book, the preparation of its illustrations, and the personal superintendence of its printing, added to his other duties, rendered the year of his sojourn at Worcester

* "The Chemistry of Combustion, applied to the Economy of Fuel, with special reference to the construction of fire chambers for steam boilers. By E. W. Dimond, Worcester: printed by Edward R. Fiske, 1867."

an exceedingly busy one. At times he was overwhelmed with labor, and worked sixteen hours a day. But he accomplished successfully his undertaking.

While this year's labor had afforded him the means of discharging all outstanding obligations incurred in his education, of which he was prompt to relieve himself at the earliest practicable moment, it had also temporarily impaired his natural vigor of body and mind: he felt the need of rest and recreation. Possessing now the means of satisfying a strong desire of seeing something of the countries, peoples, and institutions of Europe, he decided to gratify it, and went abroad in July, 1867.

During the summer he travelled through parts of Wales, Scotland, and England, visiting historic spots of general interest, and at the same time closely observing the conditions and industries of the people. He examined, also, some of their schools of agriculture, and noted carefully the courses of study and methods of management. As the season advanced, he went upon the Continent, and travelled more or less in France, spending considerable time at Paris, where the French Exposition was then in progress. As the colder months drew near, invigorated in health, and longing for further investigations in his favorite sciences, he went to Dresden, where he spent the winter in study, and attendance upon scientific lectures.

It here becomes necessary to recur briefly to the early history of the New Hampshire College of Agriculture and the Mechanic Arts, with which his life from this time onward became identified. A bill, introduced into congress by Senator Morrill of Vermont, "donating land to the several states and territories which may provide colleges for the benefit of agriculture and the mechanic arts," became a law on the second day of July, 1862.* By its conditions, the state of New Hamp-

*This idea of founding agricultural colleges upon grants of public land was not, probably, original with Senator Morrill. Mr. James O. Adams, secretary of the New

shire became entitled to one hundred and fifty thousand acres of Western land, provided she should make provision for the establishment of such a college inside her limits within four years from this date.

No decisive action, in relation to this law, was taken by the legislature until its June session in 1866, when less than a month remained of the period fixed for its acceptance. At this time an act was passed establishing the New Hampshire College of Agriculture and the Mechanic Arts, to be placed under the control of nine trustees, five to be appointed by the governor with the advice of the council, and four by the trustees of Dartmouth college. The trustees were directed to appoint a faculty of instruction, and "on or before the twentieth day of May, annually, to make report to the legislature of the financial condition, operations, and progress of the college, recording such improvements and experiments made, with their cost and results, including state, industrial, and economical statistics, as may be supposed useful." They were also authorized to locate the proposed college at Hanover, and "to furnish, so far as may be practicable, free tuition to indigent students, and to make provision for the delivery of free lectures in different parts of the state upon subjects pertaining to agriculture and the mechanic arts."

In accordance with the provisions of this law a board of trustees was appointed, the college located at Hanover, and measures taken for its opening for the reception of students in the autumn of 1868,—the lands donated by the United

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Hampshire Board of Agriculture, says, in a valuable paper entitled "An Hundred Years' Progress," and read at several meetings of the Board,—"The idea of a college of education for the sons of farmers, and appropriating public lands to meet the expense, was not original with the distinguished senator of Vermont, whose name should be held in grateful remembrance by all the sons of toil. If history has been truthfully written, long before his day it was said by one of New Hampshire's public men, 'The state has now unappropriated lands, profiting little or nothing; and to what better use can they ever be devoted than to the improvement of husbandry? Is it asked in what way the lands may be made to serve this purpose? We answer, Let them be given to support a professor of the art and science of agriculture at our college.'"

States having been sold by the governor and council for the sum of eighty thousand dollars, and the income thereof placed at the disposal of the trustees.

One of the most important of the early duties devolving upon its trustees was the appointment of some suitable person as first professor of the new college. A man well versed in natural science, possessing some practical knowledge of agriculture and mechanical pursuits, was wanted, who, with a comprehensive view of the provisions of its act of incorporation, and of the present and prospective wants of the people of the state, with few precedents to guide him, could devise a proper scheme of study, secure the services of a competent faculty of instruction, procure proper buildings, and launch into being a successful institution for instruction in agriculture and the mechanic arts, to be sustained upon an income of four thousand eight hundred dollars a year.

Such a person, generally, is not readily found. It occurred, however, to Dr. Bouton, his old pastor, who had observed his course from boyhood, that Mr. Dimond was a man well suited to the place; and he suggested his name to the trustees. Several interviews and some correspondence between him and members representing the board soon followed, and resulted in his election, on the twenty-eighth day of April, 1868, as professor of general and agricultural chemistry. He was at this time in Germany. President Smith immediately notified him of his appointment, and placed at his disposal the sum of three thousand dollars, to be by him expended for books and apparatus for the college.

Prof. Dimond returned from Europe on the first of August, in the full vigor of restored health, conversant, from observation, with the various courses and methods of instruction then in use at the best agricultural schools in England and upon the Continent. He brought with him a considerable collection

of books and valuable apparatus, ordered, as before stated, by the president. As the college was to be opened in September, he went almost immediately to Hanover to make such preparations as this event required.

He soon realized the important fact that the New Hampshire College of Agriculture and the Mechanic Arts was, as yet, little more than an institution upon paper, and that its actual, living existence was still in the future. It possessed not a single building, even of the humblest character, not a recitation-room or apartment of any kind in which to store the books and apparatus which he had brought with him from abroad. The first term began, at the time designated, with a class of less than a dozen students. A judicious course of study had been previously prepared, and the work to be done by the instructors and their pupils was systematically commenced. As faithful instruction was given by the several professors as the students would have received had they numbered an hundred or more. The first year, ere long, passed away, and the examination, at its close, gave conclusive evidence that a good and encouraging work had been accomplished.

As the examining committee followed this first class from one recitation-room to another belonging to Dartmouth college, thence to the laboratory of the medical school, and finally to the private parlor of the professor of animal and vegetable physiology, it became very apparent that a local habitation as well as a name was indispensable to the attainment of highest results by the professors and students in the important work which they had undertaken. No one saw more clearly or felt more keenly the need of a proper college building than did Prof. Dimond. A structure costing about forty thousand dollars was imperatively necessary. But how to obtain it was a problem of very difficult solution. By the act of congress

before alluded to, the trustees were withheld from expending any portion of the fund given by the United States in buildings, and this constituted, at this time, the institution's only fund.

In his first report to the trustees, dated April 26, 1869, Prof. Dimond thus alludes to this imperative want: "After much study and many hours of consultation with our president, the conclusion has been reached that the wants of the institution can be most advantageously met, and with the greatest economy of means, by the erection of a single plain and substantial building of brick, sufficiently commodious for all present purposes. One of the finest sites in the town, looking down the Connecticut valley, has been selected, and we have no doubt but that the trustees of Dartmouth college, in their desire to offer the state college any facility in their power, will be disposed to set apart this valuable site for our use without expense to the state.

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"Such a building, properly furnished and equipped, would not only enable us to render the instruction sufficiently practical for our students, but it would also place the institution in such an independent position as to silence the opposition which has arisen, on the alleged ground that the state college is to become only a subordinate department of the old college. If we can give the students of the state college the largest and most modern building in the whole institution for their local habitation, and one designed, arranged, and equipped for their special wants, what more could be desired for a beginning?

"A building of some sort we must have, in addition to all the facilities that Dartmouth college can furnish, or the institution cannot go on with any reasonable hope of success; and, moreover, there is a pressing demand for its *immediate* use."

During the vacation which followed the close of this first

year, Prof. Dimond was married (July 13, 1869) to Miss Sarah Cutler Mason, daughter of Henry H. Mason, Esq., of Springfield, Vt. It may be here stated, in anticipation, that Mrs. Dimond ever deeply sympathized with her husband in all his high purposes, and voluntarily shared such of his labors as her sphere allowed. Possessed of a clear and distinct chirography, and writing with great rapidity, she was able to afford to him, from time to time, very important clerical assistance. After a happy union of seven years, she and three little daughters survive him.

It so happened, fortunately, that about this time Dartmouth college received, from the estate of the late Hon. David Culver, of Lyme, the sum of fifteen thousand dollars, bequeathed to it for the promotion of agricultural science. This, supplemented by a further amount of ten thousand dollars and a valuable tract of land suitable for a site, its trustees offered to contribute towards the building desired, provided the state of New Hampshire would furnish a further sum of fifteen thousand dollars to complete the amount required.

This generous offer was presented by the trustees of the agricultural college to the legislature at its June session in 1869. No great enthusiasm in relation to the new institution was manifest among the members when their attention was first called to this proposal. Deep-seated prejudices occupied the minds of some, and apathy those of many more. It was evident that it would be declined, unless efficient means were taken to awaken an increased interest in the new college, and to demonstrate conclusively its great value to the agricultural welfare of the state.

At this juncture, Prof. Dimond went to the capital, where, aided by other devoted friends of the college, he made such explanations to the committee having the matter in charge, and to individual members, as convinced them of the impor-

tance of the new institution, struggling into life and asking aid of the state, and dispelled many of the clouds of ignorance which had previously enveloped it. Having himself sprung from the agricultural class, and manifestly anxious to advance its interests, his clear statements regarding the wants of his college, emphasized by a courteous and earnest manner, impressed those whom he approached, and secured, not only to the institution which he represented, but to himself, many valuable friends. The sum asked for was granted by the legislature, and Prof. Dimond returned to his work encouraged, and feeling that an advance in his enterprise of very great importance had been made.

To Prof. Dimond was entrusted the designing of suitable plans for the building proposed. Such, upon being subsequently submitted, were adopted by the trustees, and to him was committed the superintendence of its erection. He entered at once upon the duties assigned him, but soon found that labor and building materials were very dear, and that forty thousand dollars was a sum scantily sufficient for the erection of a thoroughly-constructed brick building one hundred feet long, sixty feet wide, and three stories high above an ashler basement. These facts, however, did not discourage him. His whole life hitherto had been devoted to the overcoming of obstacles, and the accomplishing of much with limited means.

Advantageous contracts were, ere long, concluded, and the structure rose, stage after stage, to its completion. During its progress, he performed the double duties attaching to the positions of professor of chemistry and of constructing agent, and discharged them well. His classes gave no evidence of having received neglect, and the expense of the convenient and substantial building, when completed, was found not to have exceeded the appropriation.

No one thing has done more to advance the welfare of the

agricultural college than the erection of this comely structure. It is by far the finest of all the university buildings, while in thoroughness of construction, and its adaptation to the purposes for which it was designed, it is surpassed by none in the state. It bears the name of Culver Hall.

Observation and experience had convinced Prof. Dimond of the importance to the agricultural college of a farm to be used as an experimental station, and to afford remunerative occupation to students of limited resources during their hours of leisure. Its operations would also give practical illustrations of the principles taught in the laboratory and recitation-rooms.

In 1869, a farm of about one hundred and thirty-five acres, lying in close proximity to the college grounds, and admirably adapted to these purposes, was put upon the market. Aware that the college had at command no funds for its purchase, he at once bought it upon his own account, and offered it to the trustees at cost, to be conveyed to the college at their convenience, should they elect to purchase it.

In the autumn of 1870, Mr. John Conant, of Jaffrey, visited the college. He had, in the course of a long life, made a large estate in farming, and was anxious to devote a portion of it to the promotion of the agricultural welfare of his state. Prof. Dimond, who had been apprised of his coming, met Mr. Conant at the station, and took him at once to his house. He was living, at the time, in the inexpensive, square, one-storied wooden cottage upon his farm. It was altogether without pretensions, having as its characteristic features a large square chimney rising from its centre, and a small addition at one end. Upon its low walls were the glaring white paint and fresh green blinds which so strongly impressed Mr. Dickens upon his first visit to America. Few New Hampshire farmers were living in plainer houses. Yet few had homes in which could be found more that enlivens the heart and warms the affec-

tions and expands the mind. Cheerful faces, books, pictures, taste, and good housewifery impressed all who partook of its simple hospitalities.

The writer of this memoir was at Hanover on this occasion, and accompanied Mr. Conant and the professor in a stroll over the farm on the afternoon of his arrival. Mr. Conant examined the land and buildings, making particular inquiries regarding the character of the soil, the crops, the stock, and the cost of the farm. Culver Hall was then in process of erection, and gave promise of ample accommodations for the classes soon to occupy it. In the corps of agricultural professors was eminent ability for their instruction, while near at hand was the academical faculty, from whom any assistance needed might be obtained.

Mr. Conant readily comprehended the plan and aims of the college, and was very favorably impressed with what he saw. "I have concluded to buy this farm of Prof. Dimond and give it to the college," said he, aside and in an undertone, the evening after his arrival. "He [professor D: ıond] has expended two hundred dollars in repairs of this house: do you think I ought to pay for these?" He subsequently concluded that it was just he should, and that amount was added to the original cost of the farm, when he subsequently bought it and transferred it to the college. "These boys should have some place in which to live," remarked he, in his quiet monotone, the next morning, in relation to the agricultural students, then boarding and rooming at different places in the village, as they could find accommodations. "I will give five thousand dollars towards the twelve which would probably be required for building a suitable farm- and boarding-house, if the state will give the other seven. That, with the farm, will make twelve thousand that I will offer now. Perhaps I may hereafter do something more." He had revolved the subject in the night-watches,

and the enterprise appeared to him pregnant with benefits to the great class whose welfare he had so long at heart. The ability and aptitude for his work, possessed by Prof. Dimond, did not escape his observation, while the genial hospitality of his simple home assured him that in its senior professor the college had secured a kind friend and adviser for all who might resort thither for instruction.

Mr. Conant passed three days at Hanover, visiting all departments of the university, and discussed at length with President Smith, to whom the agricultural college owes a large debt of gratitude, its high aims, and the means relied upon for their attainment. It was his last and only visit. The infirmities of advanced age have since confined him at his home in Jaffrey. They have not, however, beclouded his mind, and he has ever since watched with deepest interest the progress of the college, aiding it, from time to time, until his pecuniary gifts have reached an aggregate of seventy thousand dollars.

The suggestion by Mr. Conant of a boarding-house for students was not forgotten. The increasing need of such a structure became more and more apparent as their number increased, and Prof. Dimond was directed by the trustees, not long after, to procure the necessary plans, and cause to be erected a suitable building of brick, adequate to afford the accommodations sought. This work increased considerably the various duties already imposed upon him. As Mr. Conant was to defray but a part only of the expense of the building, he found it necessary to make a second appeal to the legislature for an appropriation to meet the balance. His personal influence, increased by the assured success of the college, availed to secure the object sought. A grant of five thousand dollars was made for this purpose in 1871, and was followed by another of seven thousand in 1872.

These, with the amount provided by Mr. Conant, sufficed to meet the expense of the building. Out of respect to him who had first suggested it and contributed so largely towards its erection, it was named Conant Hall.

The daily experience of the professors and students in the laboratory of Culver Hall was not long in demonstrating the great importance of a supply of gas in that apartment. Convenience, security, and economy made for it an imperative demand, which Prof. Dimond concluded, if possible, to meet. His first plan contemplated only the erection of works of small capacity, sufficient to supply the necessities of Culver Hall. But enterprising citizens of Hanover soon learned his purpose, and earnestly urged such an enlargement of them as would render them adequate to meet the wants of the other buildings of the village. To this request, upon certain conditions, he subsequently acceded. To him, as most competent for the undertaking, and having the least leisure, was entrusted its execution. It was an enterprise of no small magnitude for a man with abundant time at his command: to one overloaded, as he then was, it was a heavy burden. Still he assumed it, encountering soon after a continued succession of obstacles—physical, legal, and financial—which extended from its beginning to its termination. But, like Richelieu, he had no such word as "fail" in his vocabulary, and carried it straight onward to completion and success.

One thing more, outside his professional duties, soon claimed a portion of his time,—the procuring of a suitable barn for the college farm. As the public seemed to demand that this should be made, as far as possible, a model farm, he felt particularly solicitous that such a structure might be erected as would meet its wants, and at the same time embody, in desirable forms, as many points of general utility as possible. He visited barns, recently erected, in different parts of the state,

carefully studying, in detail, their different plans. From careful reflections, and extended observations thus suggested and made, he devised one well adapted, in his view, to secure the objects sought.

This was adopted by the trustees, and a fine barn, in conformity thereto, was erected, under his superintendence, in 1875. Aside from the general management of the farm, this was Prof. Dimond's last important work outside his regular professional duties. To those heretofore alluded to, however, should be added an important service rendered by him to the state as an active member of the committee appointed upon the subject of a hydrographic survey. The report of that committee, made to the legislature in 1870, was almost wholly from his pen, while all the statistics embodied therein were of his collection.

Slight mention has been thus far made of his professional work in the lecture-room and laboratory. This increased very much, from year to year. The facilities for teaching chemistry afforded by Culver Hall were so much superior to those afforded elsewhere in the university, that he was made their instructor of that science by all the other departments, with the exception of the medical. The work thus thrown upon him was at times onerous and exhausting. For considerable periods he attended upon four and five classes a day, meeting some in the laboratory and recitation-room, and before others delivering lectures illustrated by experiments oftentimes requiring laborious preparation. Indeed, for nearly eight years he carried along two parallel and independent lines of work. One was professional and within doors. The other was without, and consisted of the devising of plans and the procuring of means for the erection of the various buildings which the growing success of the college made indispensable, to which was added the superintendence of their erection, and of the operations ever in progress upon the college farm.

These duties, in the aggregate, were more than any human constitution could sustain indefinitely, and occasional attacks of a mysterious malady at length gave warning of serious results if his labors were not lessened. But the necessities of his situation left him no time to be sick, or to heed but partially the kindly suggestions of his physicians and friends. As one year after another passed away, and his failing health became more and more apparent, grave fears arose lest the bow, so often bent, might soon lose its elasticity, and that, upon the firm foundations which he had been laying so wisely and broadly and well, it might remain for other hands to rear the superstructure. But to his teeming brain repose was torture, and he continued in the active duties of his position until the latter days of April, 1876, when the kindly commands of President Smith, supported by the advice of his physician, imposed a temporary discontinuance of his labors. He came to Concord soon after this, and passed a night at our house. Disease was evidently doing a fatal work. The tired brain had lost much of its wonted vivacity, and the ready repartee, which was to him as natural as his breath, came forth but seldom. We feared, when we bade him good-night and closed his chamber door, lest our morning salutation might be a silent one. The progress of an invalid in pursuit of health is a weary one. He visited the centennial, but his illness was a bar to the full enjoyment of the ten thousand objects that interested him. From Philadelphia he returned northward, and travelled leisurely through sections of Vermont, tarrying for a short period at Alburg springs. But becoming no better, and yearning for the presence of his family and his farm-house home, he returned to Hanover. His last sands had nearly run. A few days after, on the sixth of July, 1876, all that was mortal of Ezekiel Webster Dimond became cold in death. An autopsy disclosed disease of the brain, and excited universal astonish-

ment that suffering from such a malady he had been able to do the great work which he had so successfully accomplished.

His obsequies were attended by personal friends from abroad, and by such of his neighbors as the college vacation had left at home. The afternoon was as beautiful as a transparent atmosphere and perfect quiet could make it. The body was borne to the college church, where loving hands, which had woven fragrant flowers into festoons and chaplets of rare beauty, spread them upon his casket. Sweet song and earnest prayer, accompanied by scripture readings, and a brief address by the venerable president, who had known him so well, and fully sympathized in all his noble purposes, were the main features of the service. His grave had been made upon an elevated spot in the beautiful cemetery a few rods west of the village, and there, as the sun, now nearing the crest-line of the western mountains, threw his slanting rays through the pines and dispelled their shadows, his manly form was tenderly lowered to its last repose. How vividly springs up in memory those sad words of Schiller:

"Alas! the ruddy Morning tinges
A silent, cold, sepulchral stone;
And Evening throws her crimson fringes
But round his slumber dark and lone."

Such is an imperfect detail of some of the principal incidents in the life of Prof. Dimond. To an abler pen than ours should be left the duty of recording the characteristic qualities of his mind and heart. To the president of his college it naturally belongs, and, but for the prostrating illness from which he has not yet fully recovered, to him it would have been assigned.

Prof. Dimond possessed a variety of valuable qualities rarely combined in one man. Nature had bestowed upon him a good physique. This had received additional vigor from the early

activities of his farm life, and subsequently from those which the necessities of his educational period called forth. He stood erect, about five feet eleven inches tall, inclining but little if in any degree to stoutness, with a comely trunk and well developed limbs. He had auburn hair, and a full beard. His face, fresh, and slightly ruddy, was animated by eyes of grayish blue. His temperament was somewhat nervous, and his walk was generally rapid as of a man to whom time was valuable.

His mind, naturally clear and vigorous, had been greatly strengthened and expanded by careful and protracted study. His apprehensions were quick, and his reasoning powers keen and strong. He had a retentive memory, which held in readiness for instant use the various facts and principles with which previous acquisitions had stored it. Habitually and without effort, he was a close observer of current events, and his opinions, unconsciously generalized therefrom, were rarely erroneous.

He was a bold man, and of buoyant spirits. He was not disheartened by obstacles, for his whole life had been one of successful struggle. He never feared permanent failure, and his courage rose as emergencies required its increase. He never anticipated defeat, and sometimes, like Gen. Taylor, charged on through successive discomfitures to final victory. He accepted the truth of his class motto, at Meriden :

"Palma non sine Pulvere."

He had great industry, and was a hard-working man, never sparing any personal efforts necessary to success. He was never idle, and, as a present aim became assured, another immediately engaged his interest. He regarded little his personal comfort, and rarely rested after an achievement.

Partly from nature, but much from his early experiences,

he possessed a wonderful power of producing important results from slender means. He well understood that the power of a stream depends greatly upon its fall, its head being oftentimes of more consequence than its volume, and employed his forces at their points of highest efficiency.

To him had been given many of the qualities attaching to successful leadership. He ever saw in advance the future necessities of an enterprise, and made timely preparations to meet them. He was fertile in resources, and patient in overcoming difficulties, whether expected or unanticipated.

While Prof. Dimond loved science for its own sake—as who of its votaries does not?—he loved it more as the guide of art and the promoter of social benefits. The scientific discoveries which never ceased to interest him did so principally on account of the good possible to result therefrom to humanity. For this reason he continually reminds one of Count Rumford, who was ever contemplating the utilities of science, and was as much a philanthropist as he was philosopher.

His was not a vivid imagination, nor was his a poetic temperament. He had no time and little inclination for flights of fancy, but there was born in him a strong common-sense—a gift of God which education cannot furnish—without which talents the most brilliant are a possession of uncertain value. This did much to inspire confidence in his opinions, which were generally positive, firmly held, and openly expressed.

He was ever accessible and affable. His wit was keen and ready. He told good stories and told them well, but generally in illustration of a principle or in furtherance of a purpose. He had a keen sympathy for every one struggling upwards, and a natural disposition to aid him. Public spirit he possessed, too, in large measure, anxious for the best good of his state and nation, and at the same time was keenly alive to the more limited interests of his town and college.

As a popular speaker he was effective, presenting his ideas forcibly, and using, from time to time, such illustrations as tended to make perspicuous his thoughts, and maintain undiminished the interest of his auditors. He had most concern for subjects of general utility, and his occasional addresses at meetings of the Board of Agriculture, in different parts of the state, were always valuable, and gladly received.

He was, from the first, not only its senior professor, but the general business agent of the agricultural college. Its financial affairs were largely entrusted to him, most of its receipts and expenditures passing through his hands. Its resources were generally limited, and never abundant; yet he so managed them as to avoid financial embarrassments of every kind. The variety of operations continually in progress gave rise to a multiplicity of accounts, at times somewhat complex. A careful examination of these, since his decease, by a committee of the trustees, has afforded proof of his fidelity, and in their report they "bear willing testimony to the honest zeal and faithful services at all times exhibited by Prof. Dimond in behalf of the interest of our college."

He was enthusiastic in his chosen work, and no one has done more for the advancement of agricultural science in New Hampshire than has he. The path he trod was to a great extent a new one. He, like those similarly engaged in other states, had few precedents to guide him. Much apathy, on the part of those whose best interests he so earnestly sought to promote, increased the discouragements incident to a keen sense of extensive wants, and of narrow means to meet them. But an abiding faith in the ultimate success of his enterprise, and in its value as an elevator of the great class to which he was born, ever cheered and sustained him. His life has been a short one, for he died at the age of not quite forty years; but his achievements were out of all proportion to its length.

Said President Smith, at his funeral, "He has accomplished in a little more than seven years the work of an ordinary lifetime." A visit to the institution he has been so largely instrumental in rearing, will confirm the truth of the declaration. There

"Si monumentum quæris, circumspice."